

Date: Wednesday, 3/8/2006 10:37:54 AM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : SHROUD ASSEMBLY
Job Number : 26109	
Estimate Number : 12217	
P.O. Number : NIA	Part Number : D34679
This Issue : 3/8/2006 S.O. No. : NIA	Drawing Number : D3467 REV.A
Prsht Rev. : NC	Project Number : N/A
First Issue : NIA Type : PURCHASED PARTS	Drawing Revision : A
Previous Run : NIA	Material : NIA
Written By : <i>See document Below</i>	Due Date : 3/31/2006 Qty: <i>10</i> Um: Each
Checked & Approved By : <i>06.03.08</i>	
Comment : est rev. A 06/02/06 new issue EC	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	OUTSIDE SERVICE	OUTSIDE SERVICES
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Comment: Sub-Contracting Issue P/O: *00000768* *06/03/09*
 Email or Ship DXF file to vendor
 Laser Cut per Dwg D3467 flat pattern D3467-9F
 Material release note required

2.0	D34679F	FWD PLATE FLAT PATTERN
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)
 DOUBLER FLAT PATTERN

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1
 Receive & Inspect For Transit Damage
 Ensure material certification is attached

06.03.22 *(10)*

4.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK

06.03.22 *(10)*

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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Comment: SMALL & MEDIUM FAB RESOURCE 1
 1-Deburr

06.03.27 *(7)* *PTD*

2-Form as per dwg D3467 using DT8854

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
	5	One taken for template	<i>[Signature]</i>	06-03-27	1	<i>[Signature]</i> 06-03-27	<i>[Signature]</i> 06-03-27

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes (No) DQA: [Signature] Date: 06-03-27
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06-03-27	5	<i>[Signature]</i> scraped prototype	<i>[Signature]</i> 06-03-27	destroy	<i>[Signature]</i> 06-03-27	<i>[Signature]</i> 06-03-27	<i>[Signature]</i> 06-03-27	<i>[Signature]</i> 06-03-27

NOTE: Date & initial all entries

Date: Wednesday, 3/8/2006 10:37:54 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SHROUD ASSEMBLY

Job Number: 26109

Part Number: D34679

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



06-03-28

Comment: INSPECT WORK TO CURRENT STEP

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

06-03-30

8.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

06/03/31

Job Completion



06-03-30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

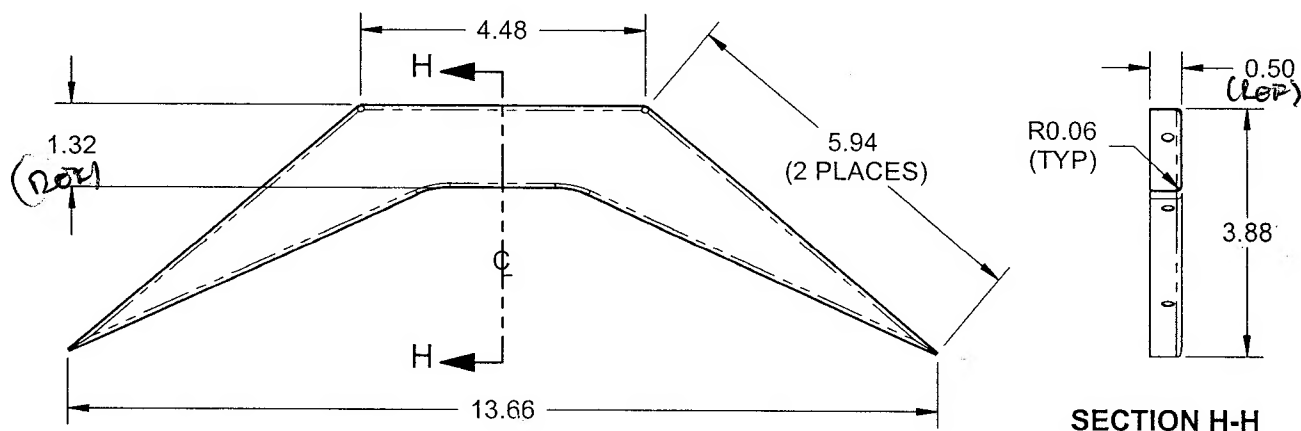
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

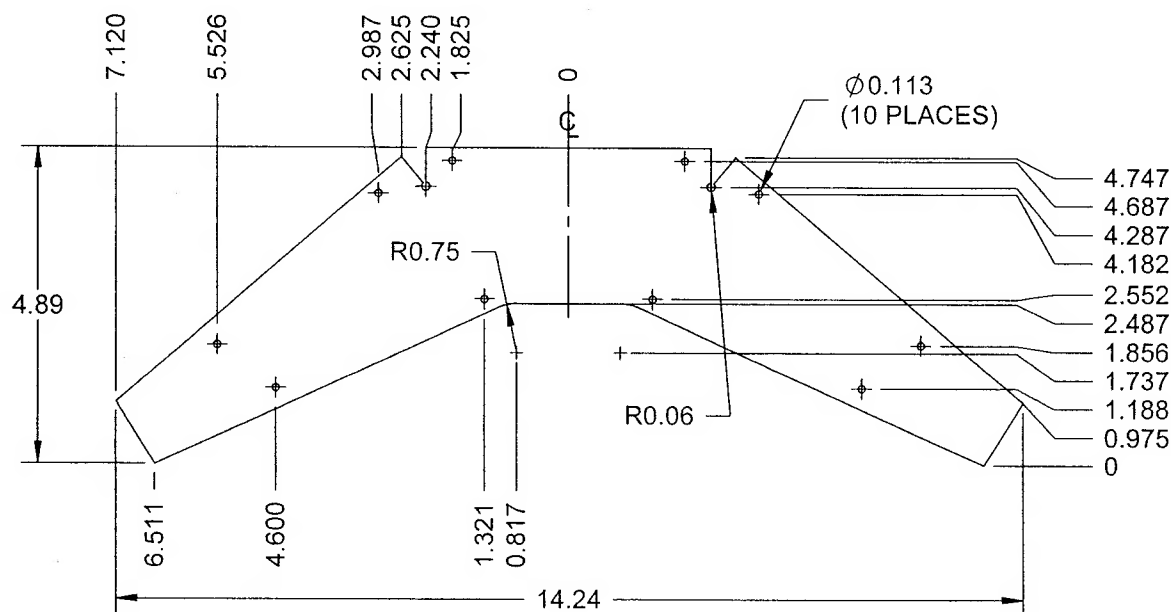
NOTE: Date & initial all entries

PRELIMINARY ISSUE

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3467	REV. A
DATE 05.12.07		TITLE SHROUD ASSEMBLY	SHEET 11 OF 15 SCALE 1:3



D3467-9 FWD PLATE BENDING DETAIL



D3467-9F FWD PLATE FLAT PATTERN

NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH
26 GAUGE SS (0.018 THICK)
(REF. DART SPEC. M304S26GA)
- 2) PART IS SYMMETRICAL ABOUT CENTER LINE
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010


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3/17/06

604-946-4453 ATTN: PETE

03/17/2006 14:38 FAX 604 946 4153
03/17/2006 14:16 FAX 6042729137INDUSTRIAL LASER CUTTING
INTEGRIS METALS002
001/004

		AK Steel Corporation Metallurgical Test Report Coshocton Works Coshocton, OH 43812		Page: 1 Lead No. 7110672 SEN No. 7110672											
		INTEGRIS METALS PO BOX 340 MINNEAPOLIS, MN 55440		INTEGRIS METALS 306 'B' STREET AUBURN, WA 98001											
MILL ORDER NO. 77106-0191 PROCESSOR ORDER NO. 427136-01 BUYER'S ORDER NO. 427136-01		PART NO. 74351497 ENGLISH UNITS - PRODUCT - METRIC UNITS 316 NOM 48.0000 X COIL													
SKID ID	PIECE	HEAT	PARENT COIL ID	NET WEIGHT											
SKID7131A3	1	720051	054019-01	3345 LBS. 4012 KG.											
SKID7131A4	1	720051	054019-01	3370 LBS. 4013 KG.											
SKID7131M5	1	720051	054019-01	3321 LBS. 4000 KG.											
SKID7131M9	1	720051	054019-01	3344 LBS. 3802 KG.											
TOTAL SKIDS	TOTAL PIECES			TOTAL NET WEIGHT											
4	4			3340 LBS. 1605 KG.											
L-Lab Analysis of Heat P-Product Analysis of Parent Coil CHEMICAL ANALYSIS															
ID	C	MN	P	S	SI	CR	NI	MO	N	CU	CO				
L 720051	.049	1.39	.027	.001	.35	18.18	8.05	.35	.04	.30	.12				
SHIPPING DATE: 03/13/2005 REMARKS: NO INTENTIONAL ADDITIONS OF MERCURY OR MERCURY COMPOUNDS, RADIUM, ALPHA SOURCE, AND LOW MELTING ALLOYS OR ELEMENTS CAPABLE OF FORMING LOW MELTING ALLOYS WERE MADE THROUGHOUT THE PROCESSING OF THIS MATERIAL.						PRODUCT DESCRIPTION CR SRT TYPE 304 STAINLESS #28 FINISH SLIT EDGE * AMS 2613 & ALL TECH REQS HAVE BEEN MET UNLESS NOTED TO OR NOTED OTHERWISE * A STM A 240 -04 EX PARA 3.1.1 ELONG WILL BE DETERMINED BY ASTM E 9 * ASTM A 490 -01 EX PARA 19.1.1 ELONG WILL BE DETERMINED BY ASTM M & S EX PARA 20.1.1.3 COIL WILL BE TAGGED ON OUTSIDE ONLY * ASTM A 566 -03 * IM-001 Rev 0, * IM-011 0 * BUYER PART# 78251497 * ASME SA-240 SECTION II PART B (2001 ED, 2002 ADDENDA) EX PARA 3.1.1 ELONG WILL BE DETERMINED BY ASTM E 9 * EN-10204 3.1.3									
PARENT COIL ID	FOR (P/F)	DIR (L, T, D)	COND	% ELONG 2 INCH MEASURED	TENSILE STRENGTH (KSI)	YS. % OFFSET (KSI)	ROCKWELL HARDNESS T ₀₁	ROCKWELL HARDNESS F ₀₁							
054019-02	T	T	ASTM	71.0	95.2	27.1	72	74							
*** CONTINUED ON NEXT PAGE ***															

3/17/2006 1:57 PAGE 001/002 Fax Server

Ryerson

T-726 P.007/015 F-587

253-280-3838

FROM-INTEGRIS

MAY-17-2005 16:05

Fax Server

T-726 P.008/015 F-527

002/004

MATERIAL TEST REPORT

From: NORTH AMERICAN STAINLESS CANADA, IN
740 IMPERIAL ROAD NORTH

Page : 1
Heat/Lot : 66K9
TIN : B42748

Sold To: INTEGRIS METALS, LTD.
7910 40TH STREET SE
CALGARY, AB T2C2Y3

Ship To: ***CUSTOMER PICKUP***
4375 14TH STREET NORTHEAST
CALGARY
ABT3E7A9

Vendor Information

Cust PO #: 416824

Cust PO DT: 11/03/05

Specifications

STAINLESS STEEL SHEET, COLD ROLLED, ANNEALED AND PICKLED.
ASTMA240/04a 480/04a, 666/03, ASME SA240/04-A05, 480/04-A05, SA666/04
Q08766D-A X 1/8 FRM, AMS5513H X MRK&FIN, MIL5059D, AMD3, X CRWN MEAS
CORROSION: ASTM A262/02aB; 180Bend-OK
Buyer Part: 4288441
304 2B .1305 IN 48 IN 96 IN
Country of Origin: UNITED STATES

Mechanical Tests

		UOM	L	O		UOM	L	O
Yield Strength - 0.2% Offset	40	KSI	F	TRANSV				
Tensile Strength (UTS)	93.3	KSI	F	TRANSV				
Rockwell B	85		F	TRANSV				
Pct Uniform Elong 2 In/50mm	57.01	PCT	F	TRANSV				
Rockwell A	85		T	TRANSV				

Chemical Composition

C Carbon-Pct	.059	CR Chromium-Pct	18.360
CU Copper-Pct	.342	MN Manganese-Pct	1.643
MO Molybdenum-Pct	.285	N Nitrogen-Pct	.037
NI Nickel-Pct	8.150	P Phosphorus-Pct	.029
SI Silicon-Pct	.289		

Comments

MATERIAL TEST REPORT

From: NORTH AMERICAN STAINLESS CANADA, IN
740 INDUSTRIAL ROAD NORTH

Page : 2
Heat/Lot : 86K8
TIN : B42748

Material free from mercury contamination. No weld repairs.
EN 10204 3.1 PED 97/23/EC Annex1, Para. 4.3 Q08763F Cond A
This document certifies the material has been tested in
accordance with applicable specifications described herein
and has met those requirements.

QA by ERIC HESS 02/01/2006

Miscellaneous Data

GUKLPH, ORNL K123
Control #: S060214
Part #: 74271441
.135 X .48 X .96

Date: 03/17/06

SOLD TO: INDS. LASER

TO 110880

S/P 90-374786 - 02

[Signature] 3/17/06

The Chemical Analysis and Mechanical Test
data was received via EDI from the above
mentioned vendor.

INTEGRIS METALS, LTD.